

## CARE AND MAINTENANCE

The film track should always be absolutely clean to prevent scratching of the film. Small dust particles in the picture frame must be removed with a small hair-brush, because they might be very annoying in the editing process if projected on the image field lens with tenfold or twentyfold magnification.

The prism of the optical adapter must be carefully cleaned from time to time with a soft hair-brush. The prism can be seen behind the picture frame on the film track when the light house is removed.

The rewinders must be regularly lubricated through the oil holes.

*Subject to alterations in the interests of technical progress.*

## MOVISCOP 16 with film pressure pad

In addition to the components described in the instruction manual, this editor is now equipped with a film pressure pad, for the purpose of preventing the image from drifting in and out of focus as the film passes over the curved film track. When threading the film, the plate of the pressure pad (which projects forwards over the film track) must therefore be raised slightly.



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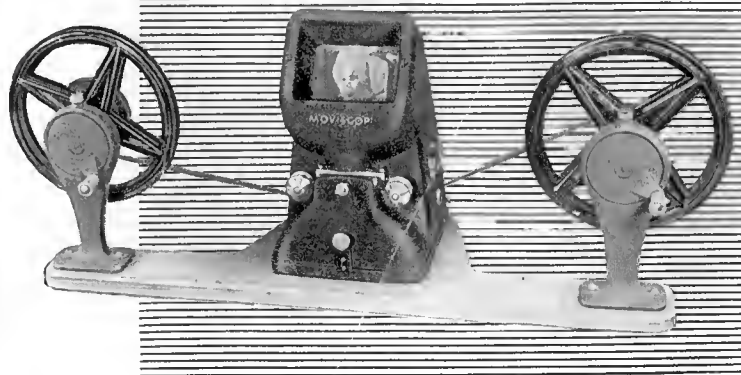
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For A. C. only!

# MOVISCOP

HOW TO USE THE ZEISS IKON  
VIEWING AND EDITING APPARATUS  
MOVISCOP FOR 16 mm CINEFILM



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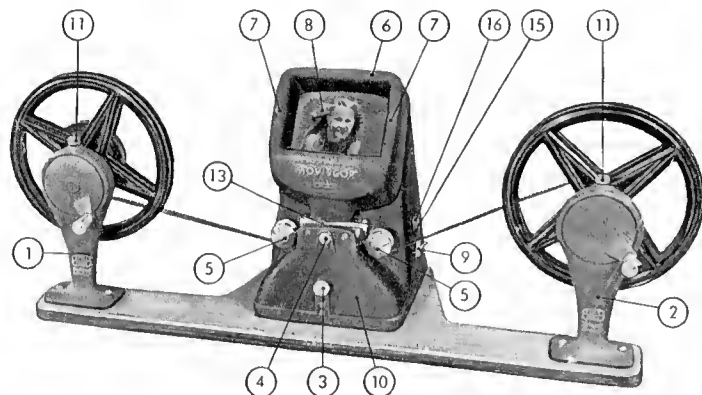


Fig. 1

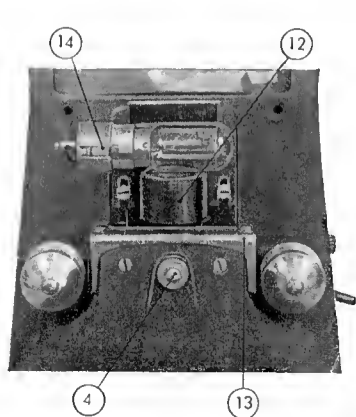


Fig. 2

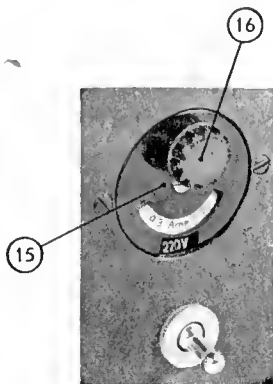


Fig. 3

the fact that the rubber footings of the MOVISCOP 16 must touch the rear of the oblong holes in the base board so that the apparatus is perfectly adjusted to the rewinders. The MOVISCOP can also be firmly attached to the base board by means of the screws that are supplied in a bag. Fig. 4 shows the holes that have to be used for the MOVISCOP 16. Before fastening the MOVISCOP, the screws in its rubber feet have to be removed.

The two rewinders have different transmissions. The right-hand transmission for forward winding, from left to right, is so geared that films to be viewed and edited can be run at the regular projector speed. The left-hand transmission, however, is geared for high-speed rewinding. The rewinders are equipped with adjustable friction, tightening the film and pressing it on the MOVISCOP film track after it has run over two film guide rollers. The spools rotate in the same direction as that in which the rewiner cranks are turned.

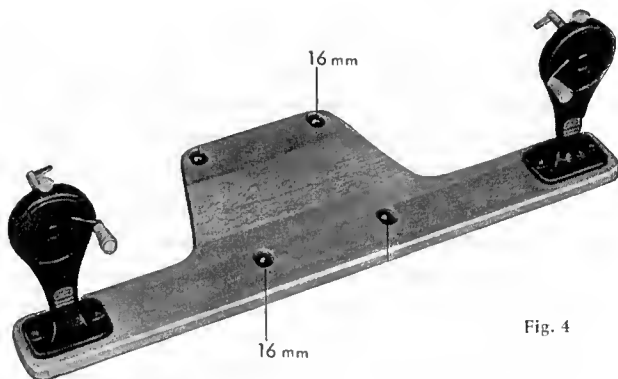


Fig. 4

## VITAL PARTS OF THE MOVISCOP

Illustration No. 1 shows the editing apparatus MOVISCOP ready for use.

- |   |                        |
|---|------------------------|
| 1 Winder, fast<br>(for rewinding)                     | 8 Image field lens     |
| 2 Winder, slow<br>(for viewing)                       | 9 Tumbler switch       |
| 3 Focusing knob                                       | 10 Casing              |
| 4 Knob for film marking                               | 11 Frictions           |
| 5 Film guide rollers                                  | 12 Condenser           |
| 6 Light hood  | 13 Film track          |
| 7 Fillister heads<br>(for removing the<br>light hood) | 14 Lamp socket         |
|   | 15 Voltage control     |
|   | 16 Screw cap with fuse |

## THE VOLTAGE CONTROL

In order to adjust the MOVISCOP to another voltage than 220 volts unscrew the screw-cap (16) on the voltage control (15). Unscrew it completely, including the built-in fuse, and loosen the screw in the middle. Then rotate the black disk until the voltage setting corresponding to the mains voltage is visible in the cut-out of the disk. (If in doubt, read off the correct voltage from the meter). Screw back the screw-cap with fuse and fasten the screw in the middle. The MOVISCOP is then ready for use. A micro-fuse for 0.3 amps  $5 \times 20$  mm should be used for all voltages. This fuse also protects the appliance from damage if it is unintentionally connected to D.C.

## SOURCE OF LIGHT AND CONDENSER (Fig. 2)

The miniature cine lamp 25 volts 1 amp with A.S.S.C.-cap (Osram No. 8203 or Philips No. 392 N) burns in a horizontal position above the condenser (12) in such a way that the film-gate in the film track (13) is uniformly illuminated.

The bulb can be conveniently exchanged when the two fillister-head screws (7) are loosened and the light house (6) is removed.

The exchange of the bulb is very simple. Upon slightly pressing the bulb into the socket (14) and simultaneously turning it to the left by  $90^\circ$  it disengages from the bayonet socket and can be removed. The new bulb

is fitted into the bayonet socket by a slight pressure in the direction of the socket and a  $90^\circ$  turn to the right. When the bulb is properly inserted the picture frame of the film track should be evenly illuminated.

The condensor (12) below the bulb has a heat-filter absorbing some 70% of the heat emanating from the bulb without any loss of light intensity. Consequently, any frame of the film can be studied at length without suffering from the heat of the bulb.

## HOW TO MARK THE FILM

When the knob (4) is slightly pressed by the thumb, the cutter makes a 1 mm incision into the film. This incision can be detected later when running the film through the hand between thumb and index finger.

## THE FILM TRACK, VIEWING AND EDITING

For projecting cine film, fit the spool with the film to be edited on the winder (1) and bolt it. If the film is to be projected normally, i. e. if a positive image is to be rendered on the viewing lens, the beginning of the film must be on the lower side of the feeding spool and the perforation must be on the side of the apparatus (when 16 mm sound film is to be edited). Prior to the projection and editing of the film adapt the friction (11) of the left winder so that the pull of the right winder sufficiently

tightens the film and prevents fluttering when it is running over the vaulted film track (13).

The film must be so inserted into the apparatus that it runs (5) around the lower side of the film guide rollers. The beginning of the film is inserted and fastened to the right rewinder as usual.

After switching on the lamp with the tumbler switch (9), the projected picture can be focused with the focusing knob (3).

The right rewinder (2) is so geared that the film runs almost at the normal projector speed.

#### REWINDING

When the film has been viewed, cut, and titled, it must be rewound before it can again be projected. This can be done in two ways:

- a) Rewinding through the apparatus. In doing so, the film must be taken out of the left film guide roller (5) and must be run over it to reduce wear and tear. When the film is run through the apparatus in this manner the perforation does not engage with the transport mechanism and the entire apparatus is out of gear (Fig. 5). It is also advisable to switch off the lamp.
- b) Rewinding without the apparatus which is, therefore, removed backward from the oblong holes in the base board.

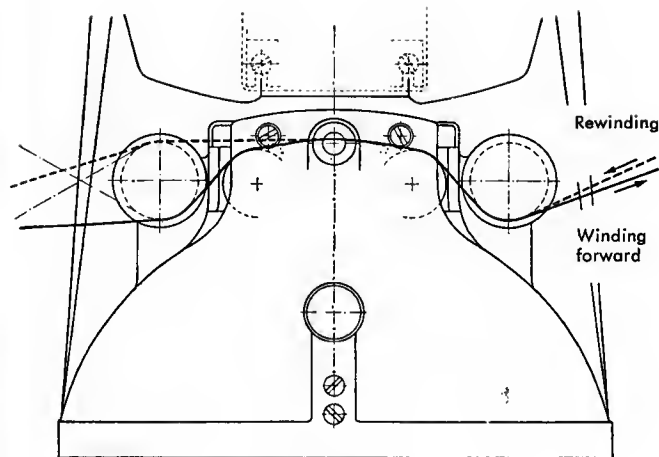


Fig. 5

In rewinding with or without the apparatus care should be taken that the end of the film is led around the lower side of the spool core when it is inserted into the left spool. The spool must be wound clockwise, otherwise the film cannot be projected normally.

The left rewinder is especially geared for highspeed rewinding.

Before rewinding the film, loosen the friction of the left rewinder (11) while applying some friction to the right one, so that the film does not come off the right-hand spool should the rewinding be slowed down or suddenly stopped.